

Day/Time	Track 1-Combustion & Pressure Gain Comb	Track 2-Aero/Heat Transfer/sCO2	Track 3- Materials
Wednesday, November 1, 2017			
Wed, 7:00am	Registration - XXXX		
Wed, 8:00am	General Session - XXX		
Wed, 8:00am	Welcome and Introduction -		
Wed, 8:10am	Opening Remarks - Richard Dennis, Turbine Technology Manager, NETL		
Wed, 8:25am	Panel Discussion: Impacts of Advanced Manufacturing and Simulation on Turbine Technologies		
Wed, 10:15am	Coffee Break - XXXX		
Wed, 10:45am	Overview of DOE Advanced Turbines Program - Richard Dennis, Advanced Turbines Technology Manager, NETL		
Wed, 11:15am	Supercritical Carbon Dioxide Pilot Plant Test Facility project		
Wed, 11:45am	Lunch		
	XXX Room	XXX Room	XXX Room
	Moderator:	Moderator:	Moderator:
	Combustion	Aero/Heat Transfer	Materials
Wed, 1:00pm	Advanced Multi-Tube Mixer Combustion for 65% Efficiency (FE00023965) GE - Michael J. Hughes	START: Turbine Rim Seal Results and Next Steps(FE0025011) Penn State University - Karen Thole	Ceramic Matrix Composite Advanced Transition for 65% Combined Cycle (FE0023955) Siemens Energy, Inc. - Jay Morrison
Wed, 1:45pm	High Temperature, Low NOX Combustor Concept Development (FE0025344) Georgia Institute of Technology -Tim Lieuwen	Design, Fabrication and Performance Characterization of Near-Surface Embedded Cooling Channels (NSECC) with an Oxide Dispersion Strengthened (ODS) Coating Layer (FE0025793) University of Pittsburgh-Minking Chyu and West Virginia University-Bruce Kang	High Temperature Ceramic Matrix Composite (CMC) Nozzles for 65% Efficiency (FE0024006), GE-John Delvaux
Wed, 2:30pm	Understanding Transient Combustion Phenomena in Low-NOx Gas Turbines (FE0025495) Penn State University - Jacqueline O'Connor	Thermally Effective and Efficient Cooling Technologies for Advanced Gas Turbines (FE0011875) Univ. of North Dakota - Forrest Ames and Illinois Institute of Technology - Sumanta Acharya	Creep-Fatigue Interaction in IN 718 (FE0011796) Purdue University -Thomas Siegmund
Wed, 3:15pm	Coffee Break - XXXX		
Wed, 3:45pm	An Experimental and Modeling Study of NOX-CO Formation in High Hydrogen Content Fuels Combustion in Gas Turbine Applications (FE0012005) University of South Carolina -Tanvir Farouk	NETL- Jim Black	Microstructure Sensitive Crystal Viscoplasticity for Ni-Base Superalloys (FE0011722) Georgia Insitute of Technology -Rick Neu
Wed, 4:30pm	Predictive Large Eddy Simulation Modeling and Validation of Turbulent Flames and Flashback in Hydrogen Enriched Gas Turbines (FE0012053) The University of Texas at Austin -Noel Clemens and Univ. of Michigan - Venkat Raman	RANS and LES ofTurbine Heat Transfer(FWP-AL05205018) Purdue Univ. - Tom Shih	ICME for Creep of Ni-Base Superalloys in Advanced Ultra-Supercritical Steam Turbines (FE0027776) OSU -
Wed, 5:15pm	High-Pressure Turbulent Flame Speeds and Chemical Kinetics of Syngas Blends with and without Impurities (FE0011778) Texas A&M -Eric Petersen	Revolutionizing Turbine Cooling with Micro-Architectures Enabled by Direct Metal Laser Sintering (FE0025320) The Ohio State University - Jeffrey Bons	ORNL (TBC) - Bruce Pint
Wed, 6:00pm	Keynote Speaker:		
Wed, 6:30 pm	Poster Session/Reception - XXXX		
Thursday, November 2, 2017			
Thur, 7:00am	Registration - Continental Breakfast - XXX		
	Combustion	Supercritical CO2	Materials
	General Session - Latham A&B		
Thur, 8:30am	Key Note Presentation:		
	XXX Room	XXX Room	XXX Room
	Moderator:	Moderator:	Moderator:
Thur, 9:00am	Effects of Exhaust Gas Recirculation (EGR) on Turbulent Combustion and Emissions in Advanced Gas Turbine Combustors with High-Hydrogen-Content (HHC) Fuels (FE0011822) Purdue Univ.- Robert P. Lucht, J P. Gore and Princeton Univ. - Michael E. Mueller	Development of Low-Leakage Shaft End Seals for Utility-Scale Supercritical Carbon Dioxide (SCO2) Turbo Expanders (FE0024007) General Electric Global Research -Rahul Bidkar	Properties of Advanced Ni-Based Alloys for A-USC Steam Turbines (FEAA125) ORNL -
Thur, 9:45am	Evaluation of Flow and Heat Transfer Inside Lean Pre-Mixed Combustor Systems Under Reacting Flow Conditions (FE0011762) Virginia Tech.- Sandeep Kedukodi, Suhyeon Park and Siddhartha Gadiraju	Development of Modular, Low-Cost, High Temperature Recuperators for the sCO2 Power Cycle (FE0026273) Thar Energy, LLC -Marc Portnoff	NETL-Albany (Omer Dogan)
Thur, 10:30am	Coffee Break - XXXX		
	Pressure Gain Combustion		
Thur, 11:00am	Pulse Detonation Engine for Advanced Oxy-Combustion of Coal-Based Fuel for Direct Power Extraction Applications (FE0025822) Oregon State U - David L. Blunck	Predicting the Oxidation/Corrosion Performance of Structural Alloys in Supercritical CO2 (FE0024120) EPRI	Abradable Sealing Materials for Emerging IGCC-Based Turbine System (FE0011929) University of California, Irvine -Daniel Mumm
Thur, 11:45am	Lunch - XXXX		
Thur, 1:00pm	A Joint Experimental/Computational Study of Non-Idealities in Practical Rotating Detonation Engines (FE0025315) University of Michigan -Mirko Gamba	Chemical Kinetic Modeling Development and Validation Experiments for Direct Fired Supercritical Carbon Dioxide Combustor (FE0025260) University of Central Florida -Subith Vasu	Gas Turbine Materials Life Assessment and Non-Destructive Evaluation (FWP49022) ANL - Jiangang Sun
Thur, 1:45pm	Effect of Mixture Concentration Inhomogeneity on Detonation Properties in Pressure Gain Combustion (FE0025525) Penn State University - Stephen Peluso	Investigation of Autoignition and Combustion Stability of High Pressure Supercritical Carbon Dioxide Oxycombustion (FE0025174) Georgia Institute of Technology -Wenting Sun	Advanced Ultra-Supercritical Component Testing (FE0025064) Energy Industries of Ohio Inc.
Thur, 2:30pm	Advancing Pressure Gain Combustion in Terrestrial Turbine Systems (FE0025343) Purdue University - Carson Slabaugh	High Inlet Temperature Combustor for Direct Fired Supercritical Oxy-Combustion (FE0024041) Southwest Research Institute - Jacob Delimont	Rapid Manufacturing Method for High-Temperature Turbine Components (SC0010175) Mikro System - Jon Moore
Thur, 3:15pm	Coffee Break - XXXX		
Thur, 3:45pm	NETL - Don Ferguson	NETL-Pete Strakey	Exploration of High Entropy Alloys for Turbine Applications (SC0013220) Questek Innovations LLC - James Saal
Thur, 4:30pm	Rotating Detonation Combustion for Gas Turbines (FE0023983), Aerojet Rocketdyne - Scott Claffin	sCO2 working group discussion	Advanced Bond Coats for Thermal Barrier Coating Systems Based on High Entropy Alloys (SC0013098) Direct Vapor Technologies – Derek Hass
Thur, 5:10pm	Open Discussion, Workshop Summary, Closing Comments and Wrap-up - Richard Dennis, Turbine Technology Manager, NETL		
Thur, 5:30pm	Adjourn		